

**REMARKS**

This Amendment is in response to a final Office action (Paper No. 08) mailed on 22 May 2007. Upon entry of this amendment, claims 16 through 28 and 30 will be pending. Applicant has canceled claim 29 without prejudice or disclaimer as to its subject matter by this amendment.

**Claim Rejection under 35 U.S.C. §112**

In Paper No. 08, the Examiner rejected claim 29 under the first paragraph of 35 U.S.C. §112 as containing a limitation not supported by the specification. Applicant has canceled claim 29 by this amendment making this rejection moot.

**Prior Art Rejections**

In Paper No. 08, the Examiner rejected claims 19 and 27 under 35 U.S.C. §102 for alleged anticipation by Widergen *et al.* (US 5,890,064). In Paper No. 08, the Examiner rejected claims 16-18, 25 and 26 under 35 U.S.C. §103 for alleged unpatentability over Widergen *et al.* '064 in view of Mauger *et al.*, (US 5,537,610). In addition, it appears that the Examiner also rejects claims 28-30 under 35 U.S.C. §103 for alleged unpatentability over Widergen *et al.* '064 in view of Mauger *et al.* '610. In Paper No. 08, the Examiner rejected claims 20-21 under 35 U.S.C. §103 as being unpatentable over Widergen *et al.* '064 in view of Mauger *et al.* '610, and further in view of Fujii (US 5,818,918). In Paper No. 08, the Examiner rejected claims 22 and 24 under 35 U.S.C.

§103 as being unpatentable over Widergen et al. '064 in view of Mauger et al. '610, and further in view of Lu et al. (US 5,999,813). In Paper No. 08, the Examiner rejected claims 23 under 35 U.S.C. §103 as being unpatentable over Widergen et al. '064 in view of Lu et al. '813.

Applicant traverses the rejection of claims 16-18 and 20 through 27 for the same reasons as stated in Applicant's January 30, 2007 amendment. Regarding claim 19, Applicant traverses the rejection of newly amended claim 19 for the same reasons as given in Applicant's traversal of the rejection of claims 16-18 in Applicant's January 30, 2007 amendment.

Regarding the rejection of newly added claim 28 and 30, Applicant traverses their prior art rejections for the following reasons:

**Regarding Applicant's claim 28**, Applicant claims that a call is provided public or private mobile communications services based on a call origination message. On Page 14 of Paper No. 8, the Examiner states that this is taught by col 7, lines 55-60, col 8, lines 21-28, col 9 lines 1-8, 39-45 and col 10, lines 2-7, col 3, lines 61-66, col 7, lines of Widergen. Applicant disagrees. Applicant submits that the above cited sections of Widergen only discuss the calling party dialing a telephone number. There is no discussion in Widergen of a call origination message or of providing public or private

mobile service based on a call origination message. Applicant further submits that a dialed telephone number is not the same as a call origination message. Therefore, Widergen in view of Mauger does not properly teach Applicant's claim 28.

**Regarding Applicant's claim 30**, Applicant claims that the call origination message is a message according to MS communication signaling. On Page 14 of Paper No. 8, the Examiner states that this is taught by col 5, lines 4-41 and col 7, lines 55-60 of Widergen. Applicant disagrees. Applicant submits that these passages of Widergen do not pertain to call origination messages.

**Applicant's Response to the Examiner's "Response to Arguments" on Pages 20-22 of Paper No. 8**

On Pages 20-22 of Paper No. 8, the Examiner commented on Applicant's Remarks of January 30, 2007. Applicant will now respond to these.

**In Paragraph 10 of Paper No. 8**, the Examiner contended that the claim language "transmitting transparently a call origination message to one of said plurality of public mobile communication network BSCs..." was not present in claims 18-19 as asserted by Applicant on January 30, 2007. Applicant submits that this language is present in each of claims 16 and 17. Regarding claims 18 and 19, Applicant instead claims "PLMN" instead of "public mobile communication networks BSCs". Applicant submits that the PLMN or

public land mobile network 1 is essentially the same thing as the BSCs 2-1, 4-m, 8-1 in the public mobile communications network. See Applicant's FIG. 2 for example. Also, Applicant requests the Examiner to refer to the first sentence of Applicant's paragraph 0017 which states, "the public mobile communication network is commonly called a public land mobile network (PLMN)." Although Applicant's claims 18 and 19 do not recite "public mobile communication network" in the transmitting transparently limitation, they do instead cite the equivalent PLMN.

**Again in paragraph 10 of Paper No. 8**, in response to Applicant supplying on January 30, 2007 standardized definition of "transparently", the Examiner asks how does the example of a caller calling another party differ from "transparently"? Applicant submits that "transparent" may or may not apply to a call origination message depending on whether its call origination message is changed. When a call goes from one network to another (e.g. landline to PLMN, or public network to private network etc), its call origination message is often changed and not restored. Applicant gave specifics in Applicant's response of January 30, 2007 of where in each of Widergen and Lu the call origination message must be changed. Applicant's invention is novel and patentable over Widergen and Lu because Applicant's invention does not cause the call origination message to change when the call goes from one network to another. In other words, the

call origination message in Applicant's invention passes transparently from the public/private communications service unit 12 to a public mobile communication network's BSC 4m.

**In Paragraph 11 of Paper No. 8**, the Examiner states again that Applicant does not claim, "the call origination message is transparently transmitted from the public/private communications service unit to the public mobile communications network's BSC". Applicant submits that in claims 18 and 19, --PLMN-- is substituted for "public mobile communications network BSC" as per the first sentence of Applicant's paragraph 0017.

**Again regarding Paragraph 11 of Paper No. 8**, the Examiner states that Applicant is arguing against references individually in his January 30, 2007 Amendment and that the combination of references do teach transparent transmission of call origination message. Applicant disagrees. Applicant submits that MPEP 2143.03 requires that all claim limitations must be taught or suggested by the prior art in order to establish prima facie obviousness. In the present case, Applicant claims transparent transmission of a call origination message to a public mobile network. Applicant submits that none of the applied prior art references teach or suggest this limitation of Applicant's

claims. Because none of the applied prior art references teach or suggest this limitation of Applicant's claims, the prior art rejections of Paper No. 8 are without merit.

**Again regarding Paragraph 11 on Page 21 of Paper No. 8**, the Examiner asserts that Widergen clearly discloses the feature of transparently transmitting a call origination message. In doing so, the Examiner cites six passages of Widergen, 1) col 7, lines 4-22, 2) col 9, lines 39-58, 3) col 12, lines 1-10, 4) col 12, lines 34-37, 5) col 13, lines 34-67 and 6) col 7, lines 63-65. Applicant will now address these six passages of Widergen:

Regarding 1) col 7, lines 4-22 of Widergen, it says:

“Call setup messages from MSC 112 to WO Gateway 124 over interface C for calls to a CMT requiring a traffic path via PTN 108, and call setup messages from PTN 108 to WO Gateway 124 over interface A requiring a call setup to a CMT in PLMN 102, both are directed to a PN. To distinguish between the two types of calls, a call control function within WO Gateway 124 adds a called network element (CNE) indicating that the call is directed toward PTN 108 or toward PLMN 102. The called network element is added to the call setup record. For example, if the call is requested over interface C, the CNE indicates PTN 108 as the called network and, if requested over interface A, the CNE indicates PLMN 102 as the called network.

The PN is the only number used within WO Gateway 124 and PTN 108 to identify a CMT. Within public cellular system 140, when WO Gateway 124 requests information through VLR enq 210 on the location of a CMT from HLR/SCP 110 using a PN, SCF 202 converts the PN to the MIN of the CMT. A wireless office system internal numbering plan (WONP) is used for the conversion.”

Applicant submits that this passage says nothing about transparent transmission of a call origination message. Quite the contrary, and as explained in Applicant's January 30 amendment, this passage discusses calls using interface C between MSC 112 and WO Gateway 124. Col 5, lines 7-12 of Widergen state that this is accomplished by MSC to MSC signaling, which means that the call origination message is altered.

Regarding 2) col 9, lines 39-58 of Widergen, it states:

“Case 5: Call from CMT located in wireless office system 142 to any public subscriber (PMT within PLMN 102 or any other public subscriber within PSTN 104):

- 1) The user of a CMT located within wireless office system 142 originates a call by dialing a two digit external line prefix plus a public telephone number to request a call to the public subscriber via an external line of PTN 108.
- 2) RAN link 216 of WO Gateway 124 receives the call through RAN 126.
- 3) Because the caller is a CMT, the call is unconditionally routed to PTN 108. The dialed number is also transparently sent to PTN 108 on the signaling link.
- 4) PTN 108 functions as for any call outgoing to the public network, it routes the call to PSTN 104 with the dialed number as B-number.
- 5) PSTN 104 identifies the destination of the dialed number. If the destination is in PSTN 104, the call is completed. If the dialed number is found in PLMN 102, the call is routed to GMSC 136 and Steps 6, 7 and 8 are completed.”

Once again, Applicant submits that this passage does not teach transparent transmission of a call origination message. Although this passage states that the dialed number is transparently sent, as stated in Applicant's January 30, 2007 Amendment, a dialed number is not the same as a call origination message as claimed by Applicant. A call origination message is pertains to the event of call origination, and its form is illustrated in Applicant's FIG. 7. As described in Applicant's specification, the "#" key is added to the MSG field of the call origination message to indicate that private mobile service is requested. This "#"key is not part of any telephone number. Furthermore, the call origination message of Applicant's FIG. 7 shows many fields. For these reasons, Applicant submits that it is entirely improper to assume that the call origination message is merely a telephone number.

3) Regarding col 12, lines 1-10 of Widergen, it states:

"Case 8: Call from CMT located in wireless office system 142 to CMT located in public cellular system 140.

1) The user of a CMT in wireless office system 142 originates the call by dialing the PN of a CMT located in public cellular system 140.

2) RAN link 216 function of WO Gateway 124 receives the call from RAN 126.

3) As the caller is a CMT, the call is unconditionally routed to PTN 108. The dialed PN is also transparently sent to PTN 108 on the signaling link."

Applicant submits that this section of Widergen does not teach transparent



transmission of a call origination message. Instead, it teaches transparent transmission of a dialed personal number, which is different from a call origination message.

4) Regarding col 12, lines 34-37 of Widergen, it states:

“1) The user of a CMT roaming in public cellular system 140 originates a call by dialing the external line prefix plus the number of a PMT to request a call to the PMT located in public cellular system 140.”

Applicant submits that this passage has nothing to do with a call origination message or the transparent transmission of a call origination message.

5) Regarding col 13, lines 34-67 of Widergen, it states:

“The embodiment shown in FIG. 3 may also be configured to include the alternative function (Guest function) of allowing a PMT to roam as if wireless office system 142 is contained within PLMN 102. With the guest function, RAN 126 and WO Gateway 124 may support PMTs of public cellular system 140 not belonging to the corporate group (guests) within wireless office system 142. This embodiment allows PMTs to use wireless office system 142 as part of public cellular system 140.

In the guest function, WO Gateway 124 is enhanced to perform a switch function for PLMN 102 without support from PTN 108. RAN link 216 is enhanced to perform calling number (A-number) analysis when a PMT or CMT operating in wireless office system 142 initiates a call. During the A-number analysis, RAN link 216 retrieves information on the calling MT from VLR 214 and determines if the MT is a corporate or public MT. MSC routing function 302 is enhanced to handle guests on the direct trunk from MSC 110 to WO Gateway 124. VLR 226 is enhanced to allow differentiation between PMTs and CMTs when a MT registers in wireless office system 142. VLR 226 determines the user characteristics from the subscriber database of HLR 206. The subscriber characteristics are stored in registers within VLR 226.

When a mobile subscriber registers in a cell of wireless office system 142, the attributes of the subscriber (public or corporate group) are downloaded from HLR 206 and stored in VLR 226 of WO Gateway 124. When processing calls involving mobile subscribers located within the wireless office system 142, WO Gateway 124 will use the attribute information to distinguish between guests and corporate mobile subscribers. In this feature, calls involving roaming public mobile subscribers (guests) are routed over the direct trunk line between MSC 112 and WO Gateway 124.”

Applicant submits that this passage has nothing to do with transparent transmission of a call origination message. Instead, it pertains to the guest function of roaming. To the contrary, this passage of Widergen describes use of the link between MSC 112 and WO gateway 124, which in col 5, lines 7-12 is described as MSC to MSC signaling, which positively changes the call origination message.

6) Regarding col 7, lines 63-65 of Widergen, it states:

“Because the call is from a CMT, the call is unconditionally routed to PTN 108. Also, the dialed number is transparently sent to PTN 108 on the signaling link.”

Applicant submits that as described above and as discussed in Applicant’s January 30, 2007 Remarks, a dialed number is not a call origination message, and consequently the above passage of Widergen does not teach transparent transmission of a call origination message.

**Again regarding Paragraph 11 of Paper No. 8,** the Examiner then asserts that

col 7, lines 4-22 and col 13, lines 34-57 of Widergen state that the call origination message includes a phone number of a called party. Applicant disagrees. Applicant has copied both these sections in examples (1) and (5) above, and as can be clearly seen, these passages of Widergen do not state or indicate that a call origination message is a phone number of a called party. Furthermore, Applicant has previously described in detail why and how a call origination message is different from a telephone number.

**Again regarding Paragraph 11 of Paper No. 8**, the Examiner states that Mauger discloses transmitting a call origination message to one of a plurality of BSCs and therefore Widergen as combined with Mauger more than adequately meets Applicant's claim limitations. Applicant disagrees. Applicant submits that Mauger, like Widergen, fails to teach transparent transmission of a call origination message to a public mobile network as claimed by Applicant. Applicant submits that since none of the applied prior art references teaches or suggests transparent transmission of a call origination message to a public mobile network, the prior art rejections of Paper No. 8 are without merit for failing to fairly teach or suggest all of Applicant's claim limitations (see MPEP 2143.03).

On the bottom of Page 21 and on the top of Page 22 of Paper No. 8, the Examiner

comments on Applicant's Remarks of January 30 at the top of Page 11 and on Applicant's paragraph 0029 by suggesting the transparent transmission of the call origination message as claimed by Applicant is not supported by Applicant's specification. Applicant disagrees. Applicant's paragraph 0029 states:

“Providing both the public mobile communication service and the private mobile communication service is performed by analyzing every message being applied to the public/private communication service unit 12, transparently transmitting the messages for the public mobile communication network to the public BSC, and routing the messages for the private mobile communication network to a module in the call manager. Such a path designation function is performed by a module of the pBTMR 54 in the call manager. When such events as call origination, call termination, location registration and SMS service events occur, the pBTMR 54 analyzes the corresponding event message and then designates a path according to the analysis. The pBTMR 54 includes a router table in which designated path information is mapped in association with the respective events, and upon receipt of a message, transmits the received message to the corresponding device and module by consulting the router table.”

As is clearly seen in paragraph 0029 in Applicant's specification, every message is transparently transmitted, including the event message for the call origination event. Therefore, Applicant submits that Applicant's claim language is clearly supported by Applicant's specification.

**In Paragraph 12 of Paper No. 8**, the Examiner asserts that the MSC to MSC signaling of Widergen does not infer that the call origination message is not

transparently transmitted because Applicant's definition of "transparently" on Page 10 of Applicant's January 30 amendment indicates that the message can be changed and still be transparent. Applicant disagrees. Applicant submits that Applicant, on Page 10 of Applicant's January 30 Amendment, states that if a message is changed and then restored to its original form within a single transmission system, the transmission system is still transparent. In the MSC to MSC signaling of Widergen, the call origination message is changed without being restored, which makes it non-transparent.

**In Paragraph 14 of Paper No. 8**, the Examiner asserts that Applicant's amendments of January 30 lacked an explanation as to how they are supported by Applicant's specification. Regarding claim 19, Applicant inserted the word "transparently". As discussed above, this finds support in Applicant's paragraph 0029.

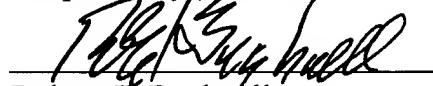
Regarding newly added claims 28 and 30, Applicant claims in claim 28 that the public or private mobile service is provided based on a call origination message. Applicant submits that paragraphs 0006, 0007 and the end of paragraph 0034 of Applicant's specification supports this claim. Regarding claim 30 that the call origination message is according to MS communications signaling, Applicant submits that, for example, paragraphs 0031 and 0033 of Applicant's specification states that the

MS transmits the call origination message.

In view of the above, it is submitted that all of the claims now present in the application are patentable over the cited references, taken either alone or combination and accordingly should now be in a conditions suitable for allowance. No other issues remaining, reconsideration and favorable action upon all of the claims now present in the application is respectfully requested.

No fee is incurred in the filing of this Amendment.

Respectfully submitted,



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